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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Vitaly Alekseevich

SMIRNOV

Serial No. : U.S. National Phase

Appln. of PCT/RU01/00121

Filed : Concomitantly herewith

For : ANTHOCYAN COLORING AGENT

MADE OF VEGETABLE RAW MATERIAL AND METHOD OF

MAKING IT

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Lori Valdes

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## PRELIMINARY AMENDMENT FILED CONCOMITANT WITH APPLICATION

Assistant Commissioner for Patents Washington, D.C. 20231

SIR:

Please amend the application as follows:

#### IN THE SPECIFICATION:

Page 1, below the title and above "FIELD OF INVENTION" ,
insert:

--This application be the United States National Phase (35 USC 371) Application of International Application PCT/RU01/00121 filed March 26, 2001 which was not published in English.--

#### IN THE CLAIMS:

Please cancel claims 1-10 and replace them with the following claims 11-27.

11. (New) An anthocyanic colorant composition made of vegetable primary materials comprisig

cyanidin glycosides,
peonidin glycosides,
organic substances,
mineral salts, and
pelargonidin glycosides, wherein
components percentage are as follows, %:

Cyanidin glycoside

0.1 - 8.6

Peonidin glycoside

0.08 - 6.45

Pelargonidin glycoside

0.05 - 4.3

Organic substance and mineral salts

the rest

- 12. (New) The anthocyanic colorant according to claim 11, wherein ratio of pelargonidin glycosides: peonidin glycosides: cyanidin glycosides must be as 1: 1.5: 2 respectively, and wherein relative optical density is the highest when it is exposed to direct light with wavelength of 505 515 nm.
- 13. (New) The anthocyanic colorant according claim 11, wherein its natural red color is retained when it is exposed to acid environment with pH from 2.0 to 7.0.
- 14. (New) The anthocyanic colorant according claim 12, wherein its natural red color is retained when it is exposed to acid environment with pH from 2.0 to 7.0.

- 15. (New) The anthocyanic colorant according to claim 11, wherein 80-100% of its natural color density is retained after treatment, such as freezing, boiling, exposure to direct solar radiation within pH range from 2 to 4.
- 16. (New) The anthocyanic colorant according to claim 11, wherein 80-100% of its natural color density is retained after treatment, such as freezing, boiling, exposure to direct solar radiation within pH range from 2 to 4.
- 17. (New) A process of production of anthocyanic colorant composition comprising growing of primary material containing anthocyan, grinding, extraction of coloring matter by acid aqueous solution in ultrasonic vibration field, filtration and concentration, wherein pre-dried vegetable maize-pulp is used as the primary material comprising anthocyan, extraction is made by mix of aqueous solutions of hydrochloric and citric acids, and concentration of coloring matter is performed in vacuum.
  - 18. (New) The process according to claim 17, wherein the primary material is additionally prepared for extraction by infusing grinded primary material in solution of extracting agent for 6-8 hours at temperature of 35-40°C.
  - 19. (New) The process according to claim 17, wherein extraction is performed at the temperature of 35° 40°C.
  - 20. (New) The process according to claim 18, wherein extraction is performed at the temperature of 35° 40°C.
  - 21. (New) The process according to claim 17, wherein extraction is performed by consecutive processing of three lots of vegetable primary material with subsequent removal of processed material and adding a new lot of vegetable material into prepared extract.
  - 22. (New) The process according to claim 19, wherein extraction is performed by consecutive processing of three lots of vegetable primary material with

- subsequent removal of processed material and adding a new lot of vegetable material into prepared extract.
- 23. (New) The process according to claim 20, wherein extraction is performed by consecutive processing of three lots of vegetable primary material with subsequent removal of processed material and adding a new lot of vegetable material into prepared extract.
- 24. (New) The process according to claim 21, wherein processing duration of each lot is 30 40 minutes at temperature of 35 40°C.
- 25. (New) The process according to claim 22, wherein processing duration of each lot is 30 40 minutes at temperature of 35 40°C.
- 26. (New) The process according to claim 23, wherein processing duration of each lot is 30-40 minutes at temperature of 35-40 °C.
- 27. (New) The process according to claim 17, wherein concentration of the colorant is performed in vacuum at temperature of 50 60°C and with depression of 750 800 mm of Mercury column.

### REMARKS

The original claims included improper multiple dependent claims. The new claims 11-27 do not include any multiple dependent claims.

Entry of the present amendment is solicited.

Respectfully submitted,

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